2.23 ICPP-MON-P-020 (MW-20-1)

WELL ID: 1074

1. Project Name: INTEC Well Maintenance for FY 2003

2. Well Location: INTEC

3. Date Maintenance Performed: Started: 5/7/03 Completed: 5/7/03

4. Video Log Information: Video logging was not performed on this well.

- 5. Maintenance Performed: Maintenance at MW-20-1 consisted of removing a stainless-steel sampling bailer that had become lodged in the well. A boom truck was used to lower a long probe into the well. The bailer was dislodged and pulled from the hole.
- 6. Observations Recorded: The condition of the surface pad and impingement posts is good. No further problems were noted.
- 7. Maintenance Subcontractor: Dynatec Drilling, Salt Lake City, UT

Field Lead: B. Reynolds/W. Jolley

Crew: S. Tawater, M. Becker, and I. Perkes

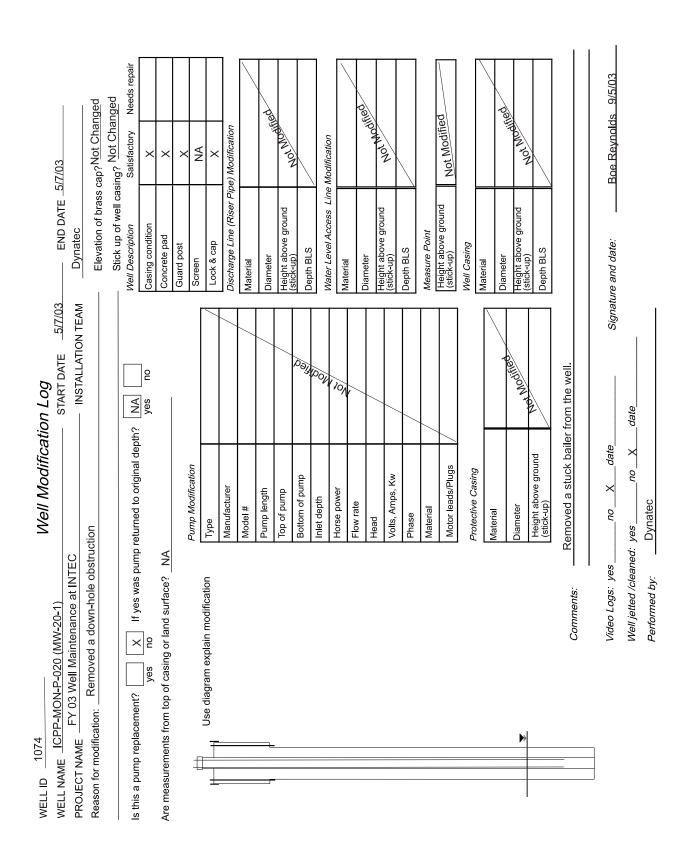


Figure 2-23. Well modification log for ICPP-MON-P-020.

2.24 TRA-06A

WELL ID: 763

1. Project Name: Site-wide Well Maintenance for FY 2003

2. Well Location: Test Reactor Area (TRA)

3. Date Maintenance Performed: Started: 6/24/03 Completed: 7/22/03

4. Video Log Information: Video logging was not performed.

- 5. Maintenance Performed: Dynatec installed three sections of 21-ft, stainless-steel, 1.25-in., discharge pipe. The new pump is located at 549.6 ft bls. Seventy-three feet of electrical cable was added along with a 3-phase, 30A/600V (NEMA #17-L30) electrical plug. To install the lockable well cap, the landing plate had to be modified to a standard landing plate that holds the 1.25-in. discharge pipe, holds the 1-in. access line, and lands on the 6-in. well casing within the 8-in. surface casing. The surface casing was extended to a 16-in. stick-up, and a new well cap was installed.
- 6. Observations Recorded: Surface completion pads and impingement posts were in good condition.
- 7. Maintenance Subcontractor: Dynatec Drilling, Salt Lake City, UT

Field Lead: B. Reynolds/L. Lopez

WELL ID 763 WELL NAME TRA-06A	Well Modification Log	ation Log — START DATE 6/24/03	03 END DATE	7/22/03	
PROJECT NAME -Sitewide Well Maintenance FY 03.		INSTALLATION TEAM	Dynatec		
Reason for modification: Extended surface casing and lowered pump.	lowered pump.		Elevation of brass cap?	cap? Not Changed	
			Stick up of well cas	Stick up of well casing? Not Changed	
s this a pump replacement?	If ves was pump returned to original depth?	oth? NA	Well Description	Satisfactory Needs repair	
yes no		-	Casing condition	×	
Are measurements from top of casing or land surface?	Land Surface		Concrete pad	×	
			Guard post	×	
rojioojijoom siolaya manajib ooli	Ритр Моділсатоп —		Screen	NA	
	lype	pois	Lock & cap	×	
	Manufacturer	MODIN	Discharge Line (Riser Pipe) Modification	oe) Modification	
	Wodel #	À	Material	pos	
	Pump length		Diameter	MONTON	
	Top of pump	549.6 ft	Height above ground		
	Bottom of pump	553.1 ft	Depth BLS	540 6 th	
	Inlet depth	552.1 ft	Mater Layol Accept 1 in a Madification	D43.0 It	
	Horse power		Motorial	Modification	
	Flow rate	Q	Material	003	
	Head	io into	Diameter	MIDOW	
	Volts, Amps, Kw	202	Height above ground (stick-up)	A.	
	Phase		Depth BLS		
	Material		Measure Point		
	Motor leads/Plugs	30A/600V	Height above ground (stick-up)	Not Modified	
	Protective Casing		Well Casing		
	8		Material		
	Material	Modified	Diameter	Dallik	
P	Diameter		Height above ground	ON TON	
	Height above ground (stick-up)	16 inches	Depth BLS		
	dded three 21 ft sectio	Added three 21 ft sections of 1.25 inch stainless steel discharge line and installed a new landing plate.	el discharge line and in	stalled a new landing plate.	
Video Logs: yes	no X date		Signature and date: E	Boe Reynolds 8/5/03	1
Well jetted /cleaned: yes	<i>t:</i> yesnoX	date			
Performed by:	Dvnatec				
	,				

Figure 2-24. Well modification log for TRA-06A.

2.25 LF2-08

WELL ID: 196

1. Project Name: Site-wide Well Maintenance for FY 2003

2. Well Location: CFA

3. Date Maintenance Performed: Started: 5/5/03 Completed: 5/27/03

4. Video Log Information: Video logging was performed on 5/27/03.

5. Maintenance Performed: Maintenance at LF2-08 included removing the 2-hp pump, discharge/access pipe, and electrical assembly; installing a new pump; and replacing the electrical wire with new 8-gauge wire equipped with a 30A/600V (NEMA #17-L30) electrical plug. The well was jetted and cleaned on 5/14/03. Approximately 100 gal of water was generated and disposed of by WGS.

The first pump, installed on 5/14/03, was damaged by sand during pumping, and a second pump was installed on 5/27/03. The well modification log shows the specifications for the second pump.

- 6. Observations Recorded: Surface completion pads and impingement posts were in good condition.
- 7. Maintenance Subcontractor: Dynatec Drilling, Salt Lake City, UT

Field Lead: B. Reynolds/L. Lopez

WELL ID 196	Well Modification Log			1	
WELL NAMELF2-08		— START DATE5/5/03	3 END DATE	5/21/03	
PROJECT NAME Borehole Deviation Logging			Dynatec		
Reason for modification: Pump wasn't working. Sediment is getting into the	diment is getting into 1	bnmb	Elevation of brase	Elevation of brase cano Not Changed	
			Stick up of well cas	Stick in of well casing Not Changed	
Is this a pump replacement? X	If ves was pump returned to original depth?	oth? X	Well Description	Satisfactory Needs repair	pair
yes		yes	Casing condition	×	
Are measurements from top of casing or land surface? _Land Surface	nd Surface		Concrete pad	×	
	Duma Madification		Guard post	×	
noisonio mercele cell	Рипр моинсаноп Т		Screen	×	
	lype	Submersible	Lock & cap	×	
	Manufacturer	Grundfos/Franklin Electrio	Discharge Line (Riser Pipe) Modification	e) Modification]
	Model#	10S20-27	Material	, the second sec	
	Pump length	41 inches	Diameter	palsii	
	Top of pump	483 ft	Height above ground	NOT MICON	
	Bottom of pump	485.4 ft	Depth BLS		Τ
	Inlet depth	484.4 ft	00000 V /	Con Madification	7
	Horse power	2 hp	Material	Modification	
	Flow rate	5 gpm	Material		\top
	Head	484 ft	Diameter	pailied .	
	Volts, Amps, Kw	230V/6.7A/1.5KW	neignt above ground (stick-up)	MON	
	Phase	3 phase	Depth BLS		\neg
	Material	Stainless Steel	Measure Point		[
	Motor leads/Plugs	8 gauge (600V/30A plug)	Height above ground (stick-up)	Not Modified	
	Protective Casing		Well Casing		1
	loisoto M		Material		
	Material	alde	Diameter	pailipe	
▶ It	Diameter	Alot Applic	Height above ground	NOT	
	Height above ground (stick-up)	2	Depth BLS		
Comments:	A pump was installed	A pump was installed on 5/14/03, but was damaged by sand.		A second pump was installed on 5/27/03.	5/27/03.
ı	Specifications listed a	Specifications listed above are for the second pump.	D.		
	X no date	5/27/03	Signature and date: Bc	Boe Reynolds 11/23/03	
Well jetted /cleaned: yes	d: yes_Xno	date 5/14/03			
Performed by:	Dynatec				

Figure 2-25. Well modification log for LF2-08.

2.26 LF2-09

WELL ID: 197

- 1. Project Name: Pump Removal and Deviation Logging for FY 2003
- 2. Well Location: CFA
- 3. Date Maintenance Performed: Started: 11/12/02 Completed: 11/21/02
- 4. Video Log Information: Video logging was not performed on 11/12/02.
- 5. Deviation Log Information: Gyro-deviation logging was performed on 11/12/02.
- 6. Maintenance Performed: Maintenance at LF2-09 included removing the pump, discharge/access pipe, and electrical assembly and replacing the old galvanized access line with stainless-steel pipe. Upon completion of well development activities, the original pump was reinstalled to the original depth.
- 7. Observations Recorded: Surface completion pads and impingement posts were in good condition.
- 8. Maintenance Subcontractor: Dynatec Drilling, Salt Lake City, UT

Field Lead: M. Towler/L. Lopez

37	Well Modification Log			!	
WELL NAMELFZ-U3		START DATE	END DATE 11/21/02	1/21/02	
PROJECT NAME Pump Removal and Borehole Deviation Logging FY 03	on Logging FY 03	INSTALLATION TEAM	Dynatec		
Reason for modification: _Pump removed to perform deviation logging	iation logging.		Elevation of brass cap?	cap? Not Changed	
Galvanized access line replaced with stainless steel	d with stainless steel.		- Stick up of well cas	Stick up of well casing? Not Changed	
this a pump replacement?	If ves was pump returned to original depth?	NA C	Well Description	Satisfactory Needs repair	
yes			Casing condition	×	
Are measurements from top of casing or land surface? Land Surface	d Surface		Concrete pad	×	
	:		Guard post	×	
	Pump Modification		Screen	×	
Use diagram explain modification	Туре		Lock & cap	×	
	Manufacturer		Discharge Line (Riser Pipe) Modification	oe) Modification	_
	Model #		Material		
	Pump length		Diameter	pallit	
	Top of pump		Height above ground	NOT MON	
	Bottom of pump		(Stick-up)		
	Inlet depth		Society of Accordance of the Action of the A	Modification	
	Horse power	POLI	Water Level Access Line	Modification	
	Flow rate	POV	Material	Stainless Steel	
	Head	Vioj	Diameter	1 in.	
	Volts Amps Kw	V	Height above ground (stick-up)	Not Modified	
	Dhase		Depth BLS	474 # blo	
	Lidad		7.1	47 LLDIS	
	Material		Measure Point	- Airiped	
	Motor leads/Plugs		Height above ground (stick-up)	Not Modified	
	Protective Casing		Well Casing		
	0		Material		
	Material		Diameter	Dallip	
>	Diameter	* Modified	Height above ground	Not not	
	Height above ground (stick-up)	Not	Depth BLS		
Comments: Tr	here was significant amounts of sedime access line was replaced with stainless.	There was significant amounts of sediment found at the bottom of the well. The old galvanized access line was replaced with stainless.	the bottom of the well	. The old galvanized	1 1
Video Logs: yes	X no date 1:	date 11/12/02 Sinnatu	Signature and date: Mi	Mike Towler 12/10/03	
	;		•		l
weil jeited /cleaned: yes	- ou				
Performed by:	Dynatec				

Figure 2-26. Well modification log for LF2-09.

2.27 LF2-10

WELL ID: 198

- 1. Project Name: Pump Removal and Deviation Logging for FY 2003
- 2. Well Location: CFA
- 3. Date Maintenance Performed: Started: 11/12/02 Completed: 11/19/02
- 4. Video Log Information: Video logging was performed on 11/13/02.
- 5. Deviation Log Information: Deviation logging was performed on 11/13/02.
- 6. Maintenance Performed: Maintenance at LF2-10 included removing the pump, discharge/access pipe, and electrical assembly to log the well. Upon completion of well maintenance activities, the original pump, pipe, and electrical cable were reinstalled to the original depths.
- 7. Observations Recorded: Surface completion pads and impingement posts were in good condition.
- 8. Maintenance Subcontractor: Dynatec Drilling, Salt Lake City, UT

Field Lead: M. Towler/L. Lopez

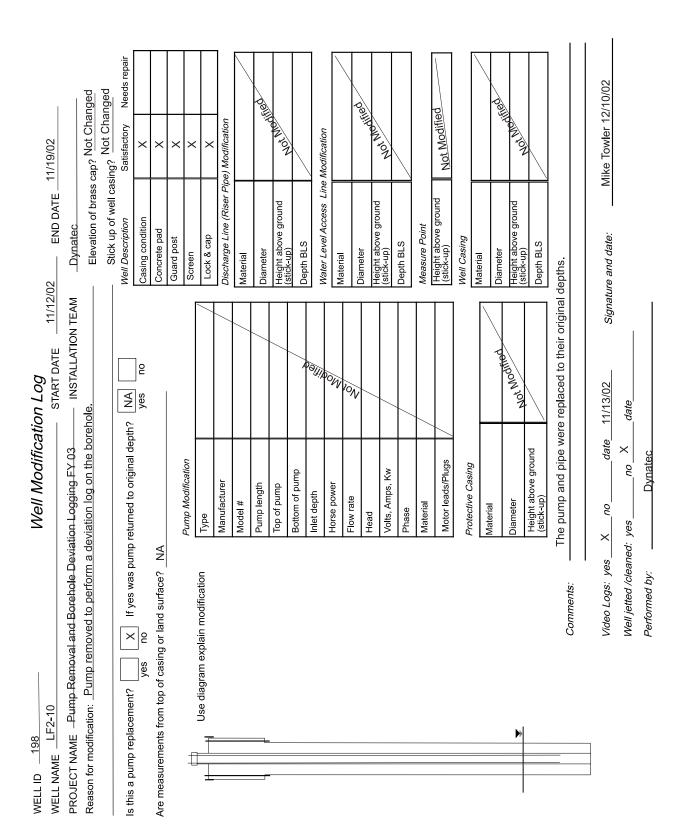


Figure 2-27. Well modification log for LF2-10.

2.28 LF2-11

WELL ID: 199

- 1. Project Name: Pump Removal and Deviation Logging for FY 2003
- 2. Well Location: CFA
- 3. Date Maintenance Performed: Started: 11/12/02 Completed: 11/19/02
- 4. Video Log Information: Video logging was performed on 11/13/02.
- 5. Deviation Log Information: Deviation logging was performed on 11/13/02.
- 6. Maintenance Performed: Maintenance at LF2-11 included removing the pump, discharge/access pipe, and electrical assembly to log the well. After logging, all original materials were returned to their original depths.
- 7. Observations Recorded: Surface completion pads and impingement posts were in good condition.
- 8. Maintenance Subcontractor: Dynatec Drilling, Salt Lake City, UT

Field Lead: M. Towler/L. Lopez

WELLID 199	Well Modification Log	i n Log Stånt påtr 11/12/02	L 4 4 4	11/19/02
	lion Logging EV 03		—— END DAIE.	
PROJECT NAME — Fump nemoval and buteriole Deviate	IIOII EOGGIIIG F 1 CO	- INSTALLATION LEAM	Dynatec	
Reason for modification: Pump removed to perform a deviation log on the borehole.	viation log on the boreho	ole.	Elevation of brass of	Elevation of brass cap? Not Changed
			- Stick up of well cas	Stick up of well casing? Not Changed
of this a min and an analysment?	f vac was arma ratinad to original death?	NA	Well Description	Satisfactory Needs repair
yes	יפוחופת וס סוופוומו תפאווו:	yes no	Casing condition	×
Are measurements from top of casing or land surface? NA			Concrete pad	×
	:		Guard post	×
	Pump Modification		Screen	×
Use diagram explain modification	Type		Lock & cap	×
	Manufacturer		Discharge Line (Riser Pipe) Modification	e) Modification
	Model #		Material	
	Pump length		Diameter	palilled
	Top of pump		Height above ground	04 107
	Bottom of pump	P	Depth BLS	
	Inlet depth	ع(بايا	Motor Louis Assessing	Manufaction A
	Horse power	Þw,	Material	Modification
	Flow rate	io _N	Material	
	Head		Diameter	poisin
	Volts, Amps, Kw		reignt above ground (stick-up)	MOT MOS
	Phase		Depth BLS	
	Material		Measure Point	
	Motor loods/Dises		ground	Modified Modified
	Motor leads/Plugs			NOTHER
	Protective Casing		Well Casing	
	Material		Material	
		pay	Diameter	pailled
>		Wodin,	Height above ground (stick-up)	NOT MOTO
	Height above ground (stick-up)		Depth BLS	
Comments:	he pump and pipe were I	The pump and pipe were replaced to their original depths.	depths.	
Video Logs: yes	X no date 11	11/13/02Signate	Signature and date: M	Mike Towler 12/10/02
Well jetted /cleaned: yes	X ou	date		
Performed by:	Dynatec			

Figure 2-28. Well modification log for LF2-11.

2.29 LF2-12

WELL ID: 724

1. Project Name: Site-wide Well Maintenance for FY 2003

2. Well Location: CFA

3. Date Maintenance Performed: Started: 6/4/03 Completed: 6/4/03

4. Video Log Information: Video logging was not performed on this well.

- 5. Maintenance Performed: Well maintenance on well LF2-12 consisted of reducing the stick-up of a 1/4-in. vapor-port tube and a 1-in. water-access line that extended 4 ft above the 4.5-in. protective casing. Both were cut off below the elevation of the casing so that a lockable well cap could be installed.
- 6. Observations Recorded: Surface completion pads and impingement posts were in good condition.
- 7. Maintenance Subcontractor: Dynatec Drilling, Salt Lake City, UT

Field Lead: B. Reynolds/L. Lopez

Crew: J. Lambert and D. Waddoups

WELL ID //24	Well Modification Log				
WELL NAME _LF2-12		START DATE 6/4/U3		6/4/03	
PROJECT NAME FY 03 sitewide well maintenance		INSTALLATION TEAM	Dynatec		
	reduce well casing stick-p		Elevation of brass cap?	cap? Not Changed	
			Stick up of well cas	Stick up of well casing? Not Changed	
Is this a pump replacement?	If yes was primp returned to original depth?	NA State	Well Description	Satisfactory Needs repair	
yes		_	Casing condition	×	
Are measurements from top of casing or land surface? NA			Concrete pad	×	
	37 - 37 - 44		Guard post	×	
	Pump Modification		Screen	NA	
Use diagram explain modification	Type		Lock & cap	×	
	Manufacturer		Discharge Line (Riser Pipe) Modification	oe) Modification	
	Model #		Material		
	Pump length		Diameter	pair	
	Top of pump		Height above ground	Not Modific	
	Bottom of pump		Depth BI S	2	
	Inlet depth	الأاه	Modern County Assessed	A A CALLED AND CONTRACT OF THE CALLED AND CONTRA	
	Horse power	oon	Water Level Access Line Modification	Modification	
	Flow rate	1101	Material	Modified	
	Неас	V	Diameter	Norw	
	Weltz Amer Ku		Height above ground (stick-up)	13 inches	
	voits, Amps, KW		(Suck-up)	Not Modified	
	Phase		Deput DEO	5	
	Material		Measure Point	-	
	Motor leads/Plugs		Height above ground (stick-up)	Not Modified	
	Protective Casing		Well Casing		
	O		Material		
	Viaterial	Qu''	Diameter	pais	
> h	Diameter	Modifie	Height above ground	TO MO	
	Height above ground (stick-up)		Depth BLS		
Comments: —	Trimmed excess vap	Trimmed excess vapor port and access line to 13 inches stick-up to allow the well cap to close	inches stick-up to allov	w the well cap to close.	
Video Logs: yes	no_X_date_		Signature and date: Boe	Boe Reynolds 8/5/03	
Well jetted /cleaned: yes	i: yesx	date			
Performed by:	Dynatec				

Figure 2-29. Well modification log for LF2-12.

2.30 LF3-08

WELL ID: 207

- 1. Project Name: Pump Removal and Deviation Logging for FY 2003
- 2. Well Location: CFA
- 3. Date Maintenance Performed: Started: 11/12/02 Completed: 5/27/03
- 4. Video Log Information: Video logging was performed on 11/13/02 and 5/22/03.
- 5. Deviation Log Information: Deviation logging was performed on 11/13/02.
- 6. Maintenance Performed: Maintenance at LF3-08 included removing the pump, discharge/access pipe, and electrical assembly for logging. The video indicated a blockage at 507 ft bls; however, the blockage is well below the pump depth and does not interfere with sampling. After maintenance, sediment was noted during pumping. Video logs were again collected on 5/22/03, revealing sediment and debris. As a result, the borehole was jetted and cleaned on 5/27/03. The pump was reinstalled to its original depth.
- 7. Observations Recorded: Surface completion pads and impingement posts were in good condition.
- 8. Maintenance Subcontractor: Dynatec Drilling, Salt Lake City, UT

Field Lead: M. Towler/L. Lopez

WELL ID	Well Modification Log	<i>ition Log</i> — START DATE <u>11/12/02</u>	END DATE	11/20/02	I
PROJECT NAME —Pump Removal and Borehole Deviation Logging FY 03	tion Logging FY 03	INSTALLATION TEAM	Dyn		1
Reason for modification: Pump removed to perform a deviation log on the borehole.	eviation log on the bor	ehole.	— Elevation of brass cap? Not Changed	cap? Not Cha	nged
			Stick up of well casing? Not Changed	sing? Not Cha	p <u>abu</u>
Is this a pump replacement?	ves was pump returned to original depth?	th? NA	Well Description	Satisfactory	Needs repair
yes			Casing condition	×	
Are measurements from top of casing or land surface? NA			Concrete pad	×	
	:		Guard post	×	
acitor file one signature measure to sell	Pump Modification		Screen	×	
	Type		Lock & cap	×	
	Manufacturer		Discharge Line (Riser Pipe) Modification	pe) Modification	
	Model #		Material		
	Pump length		Diameter	pallip	pall
	Top of pump		Height above ground	AL TON	
	Bottom of pump	Þ	Depth BLS		
	Inlet depth	<i>ال</i> الأو	14655 J. 2000 A 2000 J. 100	A Modification	
	Horse power	on	Water Level Access Line Modification	- Modification	\
	Flow rate	,o _N	Material		
	Head		Diameter	1001	ilea
	Volts, Amps, Kw		Height above ground (stick-up)	MON	
	Phase		Depth BLS	\	
	Material		Measure Point		
	Motor leads/Plugs		Height above ground (stick-up)	Not Modified	þ
	Protective Casing		Well Casing		
			Material		
	Material	Parit	Diameter	**	pall
>	Diameter	Who Myou	Height above ground	NOW TO	
	Height above ground (stick-up)		Depth BLS		
Comments: Th	The pump and pipe wer appeared to be a pipe.	The pump and pipe were replaced to there original locations. There was a blockage at 507 ft that appeared to be a pipe. Deviations were completed on 11/13/02.	locations. There was a on 11/13/02.	a blockage at 5	507 ft that
Video Logs: yes	X no date	11/13/02	Signature and date: M.	M. Towler 12/10/02	02
Well jetted /cleaned: yes	No X	_date			
Performed by:	Dynatec				

Figure 2-30. Well modification log for LF3-08 (first maintenance).

PROJECT NAME Borhole Deviation Logging Reason for modification: Pump removed for jetting and cleaning. Season for modification: Pump removed for jetting and cleaning. Season for modification: A life season preturned to original depth? Season for modification: X life season preturned to original depth? Season for modification and surface? NA Pump Modification Type Manufacturer Model # Pump length Top of pump Inlet depth Horse power Flow rate	INSTALLATION TEAM	Dynatec Devation of brass can? Not Changed	-
9		Elevation of brass	-
l ĕ Ē			gan, Not Changed
ĔĒ		Stick IID of well cas	Stick up of well casing? Not Changed
ĔĒ	inal depth? NA	Well Description	Satisfactory Needs repair
nd surface? NA		Casing condition	×
modification		Concrete pad	×
modification		Guard post	×
	ition	Screen	×
Manufacturer Manufacturer Model # Pump length Top of pump Bottom of pump Inlet depth Horse power Flow rate		Lock & cap	×
Model # Pump length Top of pump Bottom of pump Inlet depth Horse power Flow rate		Discharge Line (Riser Pipe) Modification	oe) Modification
Pump length Top of pump Bottom of pump Inlet depth Horse power Flow rate		Material	
Top of pump Bottom of pump Inlet depth Horse power Flow rate		Diameter	7
Bottom of pump Inlet depth Horse power Flow rate	/	Height above ground	TOOM *
Inlet depth Horse power Flow rate	a.	Denth BLS	ON
Horse power Flow rate	De	Work four Annual Line	Modification
Flow rate	WID	Vivaler Level Access Line Modification	Modification
	Pon	Material	
peaH	1700	Diameter	politic
Walte Amos Kw		Height above ground (stick-up)	NOWYOU
	\ \ \ !:	Depth BLS	
Phase			
Material		Measure Point	;
Motor leads/Plugs	/ sɓn	Height above ground (stick-up)	Not Modified
Protective Casing	ina	Well Casing	
Waterial		Material	
	Pair:	Diameter	pais
Diameter	Modul total	Height above ground (stick-up)	NO MOON
Height above ground (stick-up)		Depth BLS	
Comments: Cleaned significar	Cleaned significant amounts of sand from the borehole through jetting and cleaning	ehole through jetting ar	nd cleaning.
Video Logs: yes X no d	date5/22/03Signat	Signature and date: Boo	Boe Reynolds 11/24/03
Well jetted /cleaned: yes X no	nodate5/27/03		
Performed by: Dynatec			

Figure 2-31. Well modification log for LF3-08 (second maintenance).

2.31 LF3-10

WELL ID: 727

- 1. Project Name: Pump Removal and Deviation Logging for FY 2003
- 2. Well Location: CFA
- 3. Date Maintenance Performed: Started: 11/12/02 Completed: 11/20/02
- 4. Video Log Information: Video logging was performed on 11/13/02.
- 5. Deviation Log Information: Deviation logging was performed on 11/13/02.
- 6. Maintenance Performed: Maintenance at LF3-10 included removing the pump, discharge/access pipe, and electrical assembly. The USGS performed video and deviation logs. All well equipment (i.e., pump, pipe, and wire) was then reinstalled to its original depth.
- 7. Observations Recorded: Surface completion pads and impingement posts were in good condition.
- 8. Maintenance Subcontractor: Dynatec Drilling, Salt Lake City, UT

Field Lead: M. Towler/L. Lopez

WELL ID 727	727 LF3-10	Well Modification Log	<i>In Log</i> START DATE 11/12/02	/02 END DATE	11/20/02	
PROJECT NAME	PROJECT NAME—Pump Removal and Borehole Deviation Logging FY 03	tion Logging FY 03	— INSTALLATION TEAM	Dynatec		
Reason for modifice	Reason for modification: Pump removed to perform a de	to perform a deviation log on the borehole.		— Elevation of brass	Elevation of brass cap? Not Changed	eq
				Stick up of well ca	Stick up of well casing? Not Changed	p _e .
Is this a pump replacement?	×	f ves was pump returned to original depth?	NA	Well Description	Satisfactory Ne	Needs repair
<u>-</u>	yes		yes no	Casing condition	×	
Are measurements t	Are measurements from top of casing or land surface? NA			Concrete pad	×	
				Guard post	×	
#		Pump Modification		Screen	×	
<u> </u>	Ose diagram expiain modification	Туре		Lock & cap	×	
		Manufacturer		Discharge Line (Riser Pipe) Modification	ipe) Modification	
		Wodel #		Material		
		Pump length		Diameter	palsi	
-		Top of pump		Height above ground	MONTO	
		Bottom of pump	\Delta &	(stick-up) Denth BI S	2	
		Inlet depth	PYIP	19(-4111111111111		
		Horse power	PW,	Water Level Access Line Modification	е модіпсацоп	
		Flow rate	70 _N	Material		
		Head		Diameter	pals:	
		Volts, Amps, Kw		Height above ground (stick-up)	MOONTO	
		Phase		Depth BLS		
		Material		Measure Point		
		Motor leads/Plugs		Height above ground (stick-up)	Not Modified	
		Protective Casing		Well Casing		
		Motoriol		Material		
		Material	003	Diameter	pallibo,	
> +		Diameter	Modiffe	Height above ground (stick-up)	107	
		Height above ground (stick-up)		Depth BLS		
	Comments:	The pump and pipe were replaced to there original locations. The pump top was set at 580 ft bls. Deviation log was performed on 11/13/02.	replaced to there origina ned on 11/13/02.	l locations. The pump	top was set at 580	Off bls.
	Video Logs: yes	X no date 1'	11/13/02	Signature and date:	Mike Towler 12/10/02	7/02
	Well jetted /cleaned: yes	X on	date			
	Performed by:	Dynatec				

Figure 2-32. Well modification log for LF3-10.

2.32 CFA-MON-A-001

WELL ID: 1077

- 1. Project Name: Pump Removal and Deviation Logging for FY 2003
- 2. Well Location: CFA
- 3. Date Maintenance Performed: Started: 11/13/02 Completed: 11/25/02
- 4. Video Log Information: Video logging was performed on 11/20/02.
- 5. Deviation Log Information: Deviation logging was performed on 11/20/02.
- 6. Maintenance Performed: Maintenance at this well included removing the pump, discharge/access pipe, and electrical assembly. The USGS performed video and deviation logs. The pump was damaged as it was being lifted from the well and became lodged in the borehole. As a result, a new pump (refer to the well modification logs) was installed at 514 ft bls, with new 8-gauge wire and a 30A/600V plug (NEMA#17-30).
- 7. Observations Recorded: Surface completion pads and impingement posts were in good condition.
- 8. Maintenance Subcontractor: Dynatec Drilling, Salt Lake City, UT

Field Lead: M. Towler/L. Lopez

WELL ID	Well Modification Log	ation Log START DATE 11/13/02	END DATE	11/25/02	
PROJECT NAME - Pump Removal and Borehole Deviation Logging FY 03	tion Logging FY 03	INSTALLATION TEAM	Dvn		
Reason for modification: Pump removed to perform a de	perform a deviation log on the borehole.	- 1		Elevation of brass cap? Not Changed	
Pump was damaged during removal and was replaced	and was replaced.		Stick up of well cas	Stick up of well casing? Not Changed	
Is this a pump replacement?	If ves was pump returned to original depth?	oth?	Well Description	Satisfactory Need	Needs repair
yes no		>	Casing condition	×	
Are measurements from top of casing or land surface? _Top of_the MP	of the MP		Concrete pad	×	
	: :		Guard post	×	
	Ритр Модітсатоп 		Screen	×	
Use diagram explain modification	Туре	Submersible	Lock & cap	×	
	Manufacturer	Grudfos/Franklin Electric	Discharge Line (Riser Pipe) Modification	oe) Modification	
	Wodel#	10S30-34	Material		
	Pump length	4.58 ft	Diameter	pallir	
	Top of pump	514 ft bls	Height above ground	MADI	
	Bottom of pump	518.58 ft bls	Depth BLS		
	Inlet depth	517.58	Water Lovel Acress Line Modification	Modification	
	Horse power	3 hp	Material		
	Flow rate	Not Measured		103:	$\overline{\mathbf{I}}$
	Head	Not Measured	Diameter Height above ground	THOURS.	
	Volts, Amps, Kw	230V/9.5A/2.2kW	(stick-up)		
	Phase	3 phase	Depth BLS		
	Material	Stainles steel	Measure Point		
	Motor leads/Plugs	8 gauge/ 30A600V	Height above ground (stick-up)	Not Modified	
	Protective Casing		Well Casing		
	Material		Material	,	
		Pa's	Diameter	dellillo,	
>	Diameter	AMPON T	Height above ground (stick-up)	12	
	Height above ground (stick-up)	2	Depth BLS		
Comments:	There was a tight spo The pump top was s	There was a tight spot where the original pump was damaged at 240-280 ft bls. The pump top was set at 514 ft bls. Deviation log was performed on 11/20/02.	as damaged at 240-280 was performed on 11/2	0 ft bls. 20/02.	
Video Logs: yes	X no date	11/20/02	Signature and date:	Mike Towler 12/10/02	2
Well jetted /cleaned: yes	yesx	date			
Performed by:	Dvnatec				
	,				

Figure 2-33. Well modification log for CFA-MON-A-001.

2.33 CFA-MON-A-002

WELL ID: 1078

- 1. Project Name: Pump Removal and Deviation Logging for FY 2003
- 2. Well Location: CFA
- 3. Date Maintenance Performed: Started: 11/14/02 Completed: 11/20/02
- 4. Video Log Information: Video logging was performed on 11/20/02.
- 5. Deviation Log Information: Deviation logging was performed on 11/20/02.
- 6. Maintenance Performed: Maintenance at this well included removing the pump, discharge/access pipe, and electrical assembly. The USGS performed video and deviation logs. All well equipment (i.e., pump, pipe, and wire) was then reinstalled to its original depth.
- 7. Observations Recorded: Surface completion pads and impingement posts were in good condition.
- 8. Maintenance Subcontractor: Dynatec Drilling, Salt Lake City, UT

Field Lead: M. Towler/L. Lopez

Is this a pump replacement? Is this a pump replacement? Are measurements from top of casing or land surface? Are measurements from top of casing or land surface? Are measurements from top of casing or land surface? Are measurements from top of casing or land surface? Namufacturer		Elevation of brass cap? Not Changed Stick up of well casing? Not Changed Well Description Casing condition Casing condition X Concrete pad Casing condition X Concrete pad X Screen Concrete pad Concrete	등 를 1%\	ged Needs repair
If yes was pump returned to original depth? Pump Modification	OE ADJUJAO	sing condition sing condition sing condition ard post ard post creen charge Line (Riser Pipe) terial meter meter pth BLS purch Aggret Line (Riser Pipe) pth BLS] 	eeds repair
land surface? NA Pump Modification Type Manufacturer Model # Pump length Top of pump Bottom of pump Inlet depth Horse power Flow rate Head	OE AGUIDO	Pipe)	X X X X X X X X X X X X X X X X X X X	
land surface? Pump Modification Type Manufacturer Model # Pump length Top of pump Bottom of pump Inlet depth Horse power Flow rate Head		Pipe,	X X X X X X X X X X X X X X X X X X X	
Pump Modification Type Manufacturer Model # Pump length Top of pump Bottom of pump Inlet depth Horse power Flow rate Head		Pir Pipe)	X X X Modification	
Type Manufacturer Model # Pump length Top of pump Bottom of pump Inlet depth Horse power Flow rate Head		Pipe)	X X Wodification	
facturer I # I blength f pump m of pump depth s power rate		I' Pipe)	Modification	
# length pump n of pump lepth power ate			pallipon	
length pump n of pump power ate			pallipon	
pump n of pump epth power			NOON.	
n of pump epth power ate			1270	
power ate		M cai 1 00000 M love 1 ===		
power				
ate		Material	Comcanon	
		, de la companya de l		\setminus
		Diameter Height above ground	Modified	
Volts, Amps, Kw	(stic	(stick-up)	NOW	
Phase	Deb	Depth BLS		
Material	Mes		-	
Motor leads/Plugs	Hei Hei (sti	Height above ground (stick-up)	Not Modified	
Protective Casina	Wei	sing		
		Material		
		Diameter	pais.	\
	Not Mour Height	Height above ground (stick-up)	BOW TO	
Height above ground (stick-up)				
The pump and pipe were replaced to their original depths.	eplaced to their original deptined on 11/20/02.	ths,		
Video Logs: yes X no date 11/20	11/20/02 Signature and date:		Mike Towler 12/10/02	0/02
Well jetted /cleaned: yesno_Xdate_	ate			
Performed hy:				

Figure 2-34. Well modification log for CFA-MON-A-002.

2.34 CFA-MON-A-003

WELL ID: 1089

- 1. Project Name: Pump Removal and Deviation Logging for FY 2003
- 2. Well Location: CFA
- 3. Date Maintenance Performed: Started: 11/14/02 Completed: 11/21/02
- 4. Video Log Information: Video logging was performed on 11/20/02.
- 5. Deviation Log Information: Deviation logging was performed on 11/20/02.
- 6. Maintenance Performed: Maintenance at this well included removing the pump, discharge/access pipe, and electrical assembly. The USGS performed video and deviation logs. All well equipment (i.e., pump, pipe, and wire) was then reinstalled to its original depth.
- 7. Observations Recorded: Surface completion pads and impingement posts were in good condition.
- 8. Maintenance Subcontractor: Dynatec Drilling, Salt Lake City, UT

Field Lead: M. Towler/L. Lopez

WELL ID 1089 WELL NAME CFA-MON-A-003	Well Modification Log	ion Log	END DATE	11/21/02	
PROJECT NAME —Pump Removal and Borehole Deviation Logging FY 03	on Logging FY 03	—— INSTALLATION TEAM	Dynafec		ı
Reason for modification: Pump removed to perform a deviation log on the borehole	riation log on the borel		Elevation of brass cap? Not Changed	cap? Not Chan	pag
			- Stick up of well casing? Not Changed	ing? Not Chan	peg
Is this a pump replacement?	If ves was pump returned to original depth?	, NA	Well Description	Satisfactory	Needs repair
yes no		yes no	Casing condition	×	
Are measurements from top of casing or land surface? NA			Concrete pad	×	
	:		Guard post	×	
:	Pump Modification		Screen	×	
Use diagram explain modification	Туре		Lock & cap	×	
	Manufacturer		Discharge Line (Riser Pipe) Modification	e) Modification	
	Wodel#		Material		
	Pump length		Diameter		1
-	Top of pump		Height above ground	AGINDON TO .	<u> </u>
	Bottom of pump		(suck-up)	MO	
	Inlet depth	Pelyj		:	
•	Horse power	POU	evel Access	Line Modification	
	Flow rate	V 10	Material		
	- Iow rate	W	Diameter	JOLISIT .	
	nead		Height above ground	NOW YOU	
	Volts, Amps, Kw		(stick-up)	2	T
	Phase		Depth BLS		
	Material		Measure Point		
	Motor leads/Plugs		Height above ground (stick-up)	Not Modified	
	Protective Casing		Well Casing		
	- I - i - c + c M		Material		
	Iviaterial	pas:	Diameter	Jallik	
>	Diameter	Nodin ton	Height above ground (stick-up)	107	
	Height above ground (stick-up)		Depth BLS		
Comments: Th	The pump and pipe were replaced to their Deviation log was performed on 11/20/02	The pump and pipe were replaced to their original depths. Deviation log was performed on 11/20/02.	depths.		
Video Logs: yes X	no date	11/20/02 Signatu	Signature and date: M	Mike Towler 12/10/02	10/02
Well jetted /cleaned: yes	yesx	date			
Performed by:	Dynatec				

Figure 2-35. Well modification log for CFA-MON-A-003.

2.35 M1SA

WELL ID: 765

- 1. Project Name: Pump Removal and Deviation Logging for FY 2003
- 2. Well Location: Radioactive Waste Management Complex (RWMC)
- 3. Date Maintenance Performed: Started: 11/14/02 Completed: 11/26/02
- 4. Video Log Information: Video logging was performed on 11/26/02.
- 5. Deviation Log Information: Deviation logging was performed on 11/26/02.
- 6. Maintenance Performed: Maintenance at M1SA included removing the pump, discharge/access pipe, and electrical assembly. The USGS performed video and deviation logs. All well equipment (i.e., pump, pipe, and wire) was then reinstalled to its original depth.
- 7. Observations Recorded: Surface completion pads and impingement posts were in good condition.
- 8. Maintenance Subcontractor: Dynatec Drilling, Salt Lake City, UT

Field Lead: M. Towler/L. Lopez

Height above ground	were replaced to their original disperienced on 11/26/02.
---------------------	---

Figure 2-36. Well modification log for M1SA.

2.36 M10S

WELL ID: 770

1. Project Name: Pump Removal and Deviation Logging for FY 2003

2. Well Location: RWMC

3. Date Maintenance Performed: Started: 10/24/02 Completed: 10/24/02

4. Video Log Information: No video logging was performed during abandonment of this well.

- 5. Maintenance Performed: Well M10S was abandoned. The borehole and casing were filled with bentonite to seal the well. In order to allow the vapor ports to continue to be used, the well casing was not removed from the borehole. The borehole from the bottom of the well (650 ft bls) to 445 ft bls was filled with coated bentonite pellets. From 445 ft bls to land surface, the well was filled with 3/8-in. bentonite chips. Upon completion of the work, the original wellhead box was replaced and locked. A detailed summary of the abandonment activities is on file with the Hydrologic Data Repository (HDR), for further information contact the HDR.
- 6. Observations Recorded: Surface completion pads and impingement posts were in good condition.
- 7. Maintenance Subcontractor: INEEL Force Account personnel.

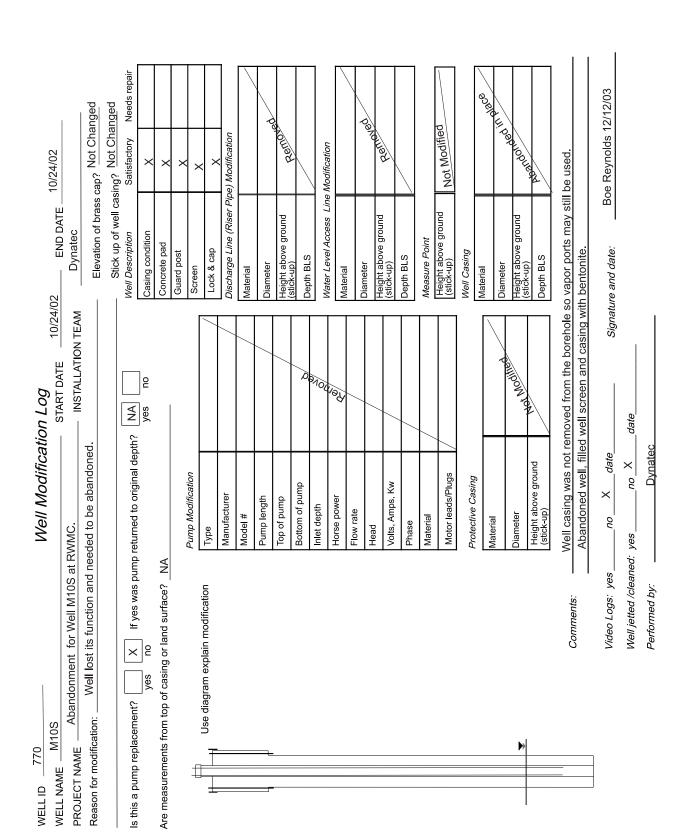


Figure 2-37. Well modification log for M10S.

2.37 SOUTH-MON-A-001 (M11S)

WELL ID: 1212

1. Project Name: Pump Removal and Deviation Logging for FY 2003

2. Well Location: RWMC

3. Date Maintenance Performed: Started: 5/12/03 Completed: 5/19/03

4. Video Log Information: Video logging was performed on 5/13/03

5. Deviation Log Information: Deviation logging was performed on 5/13/03.

- 6. Maintenance Performed: Maintenance at M11S included removing the pump, discharge/access pipe, and electrical assembly. The USGS performed video, deviation, and gyro-deviation logging. The video indicated a buildup of bacteria in the well. Seven and a half gal of Aquaclear was used to jet the borehole. Once the pH levels were neutral, all well equipment (i.e., pump, pipe, and wire) was reinstalled to its original depth.
- 7. Observations Recorded: Surface completion pads and impingement posts were in good condition.
- 8. Maintenance Subcontractor: Dynatec Drilling, Salt Lake City, UT

Field Lead: L. Lopez

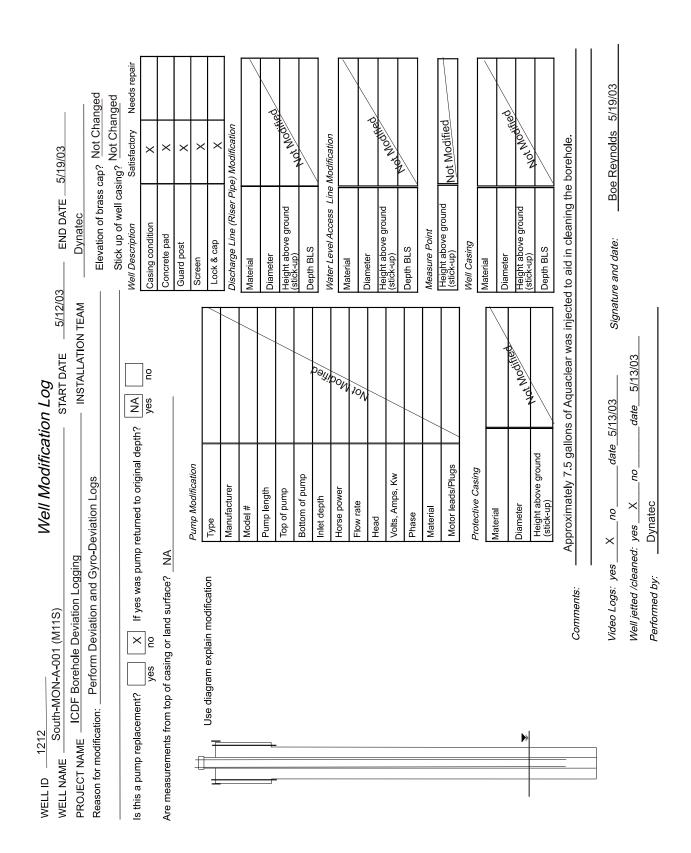


Figure 2-38. Well modification log for SOUTH-MON-A-001.

2.38 SOUTH-MON-A-002 (M12S)

WELL ID: 1213

- 1. Project Name: Pump Removal and Deviation Logging for FY 2003
- 2. Well Location: RWMC
- 3. Date Maintenance Performed: Started: 11/14/02 Completed: 11/22/02
- 4. Video Log Information: Video logging was performed on 11/21/02.
- 5. Deviation Log Information: Gyro-deviation logging was performed on 11/21/02.
- 6. Maintenance Performed: Maintenance at M12S included removing the pump, discharge/access pipe, and electrical assembly. The USGS performed video and deviation logs. All well equipment (i.e., pump, pipe, and wire) was then reinstalled to its original depth.
- 7. Observations Recorded: Surface completion pads and impingement posts were in good condition.
- 8. Maintenance Subcontractor: Dynatec Drilling, Salt Lake City, UT

Field Lead: M. Towler/L. Lopez

WELL ID	Well Modification Log	<i>in Log</i> START DATE 11/14/02	END DATE	11/22/02
PROJECT NAME - Pump Removal and Borehole Deviation Logging FY 03	ion Logging FY 03	- INSTALLATION TEAM	Dynafec	
Reason for modification: Pump removed to perform a deviation log on the borehole.	viation log on the boreho		- Flevation of brass o	Flevation of brass can? Not Changed
			Stick IIn of well casi	Stick up of well casing? Not Changed
Is this a nump replacement?	If ves was primp returned to original depth?	AN	Well Description	Satisfactory Needs repair
yes		yes no	Casing condition	×
Are measurements from top of casing or land surface? NA			Concrete pad	×
			Guard post	×
	Pump Modification		Screen	×
H— H—H Ose diagram explain modification	Туре		Lock & cap	×
	Manufacturer		Discharge Line (Riser Pipe) Modification	e) Modification
	Model #		Material	
	Pump length		Diameter	paisi
	Top of pump		Height above ground	Not Mon
	Bottom of pump	<i>A</i>	Suck-up)	
	Inlet depth	الآلا	Mortan Land Annual Line Modification	Modification
	Horse power	Pow	Material	Modification
	Flow rate	ion	Material	
	Head		Diameter	politico
	Volts, Amps, Kw		Height above ground (stick-up)	Not M
	Phase		Depth BLS	
	Material		Measure Point	
	Motor leads/Plugs		Height above ground (stick-up)	Not Modified
	Protective Casina		Well Casing	
	Motorio		Material	
	Material	pa#:	Diameter	pallir
> +	Diameter	Noding Not	Height above ground (stick-up)	NOT MOON
	Height above ground (stick-up)		Depth BLS	
Comments:	he pump and pipe were	The pump and pipe were replaced to their original depths.	depths.	
	Deviation log was periorned on 11/21/02.	ned on 11/21/02.		
Video Logs: yes	X no date 1	11/21/02Signatu	Signature and date: M	Mike Towler 12/10/02
Well jetted /cleaned: yes	X ou	date		
Performed by:	Dynatec			

Figure 2-39. Well modification log for SOUTH-MON-A-002.

2.39 SOUTH-MON-A-004 (M14S)

WELL ID: 1215

1. Project Name: Pump Removal and Deviation Logging for FY 2003

2. Well Location: RWMC

3. Date Maintenance Performed: Started: 11/25/02 Completed: 11/26/02

- 4. Video Log Information: Video logging was performed on 11/25/02.
- 5. Deviation Log Information: Deviation logging was performed on 11/25/02.
- 6. Maintenance Performed: Maintenance at M14S included removing the pump, discharge/access pipe, and electrical assembly for logging. The USGS performed video and deviation logs. All well equipment (i.e., pump, pipe, and wire) was then reinstalled to its original depth.
- 7. Observations Recorded: Surface completion pads and impingement posts were in good condition.
- 8. Maintenance Subcontractor: Dynatec Drilling, Salt Lake City, UT

Field Lead: M. Towler/L. Lopez

WELL ID 1215 WELL NAME SOUTH-MON-A-004 (M14S)	Well Modification Log	<i>ion Log</i> - START DATE 11/25/02	END DATE	11/26/02	
PROJECT NAME —Pump Removal and Borehole Deviation Logging FY 03	tion Logging FY 03	INSTALLATION TEAM	Dynatec		
Reason for modification: Pump Removed to perform a deviation log on the borehole.	leviation log on the bor	ehole.	- Elevation of brass	Elevation of brass cap? Not Changed	pə
			- Stick up of well casing? Not Changed	sing? Not Change	þā
Is this a pump replacement?	If ves was pump returned to original depth?	NA St	Well Description	Satisfactory	Needs repair
yes no		_	Casing condition	×	
Are measurements from top of casing or land surface? NA			Concrete pad	×	
	:		Guard post	×	
	Pump Modification		Screen	×	
Use diagram explain modification	Type		Lock & cap	×	
	Manufacturer		Discharge Line (Riser Pipe) Modification	oe) Modification	
	Wodel #		Material		
	Pump length		Diameter	813.	ą
-	Top of pump		Height above ground	Not Mos	
	Bottom of pump	Po	(Stick-up)		
	Inlet depth	- \$\frac{1}{2}\frac{1}	Depuil BLS		
	Horse power		Water Level Access Line Modification	Modification	
	Flow rate		Material		
	Дея		Diameter	Jailie	<u>a</u>
	Volts Amps Kw		Height above ground (stick-up)	ONTON	
			Depth BLS		
	Phase				
	Material		Measure Point		
	Motor leads/Plugs		Height above ground (stick-up)	Not Modified	
	Protective Casing		Well Casing		
	Circle M		Material		
	Material	,	Diameter	poly."	
• ••	Diameter	Nodifical Poly	Height above ground	TOOM TO	
	Height above ground (stick-up)		Depth BLS		
	The pump and pipe we	The pump and pipe were replaced to their original depths.	lepths.		
	Deviation log was performed on 11/25/02	ormed on 11/25/02.			
Video Logs: yes	X no date	11/25/02Signatur	Signature and date: \square	Mike Towler 12/10/02	2)/02
Well jetted /cleaned: yes	yesx	date			
Performed by:	Dvnatec				
•	,				

Figure 2-40. Well modification log for SOUTH-MON-A-004.

2.40 RWMC-MON-A-013 (A11A31)

WELL ID: 906

- 1. Project Name: Pump Removal and Deviation Logging for FY 2003
- 2. Well Location: RWMC
- 3. Date Maintenance Performed: Started: 11/15/02 Completed: 12/03/02
- 4. Video Log Information: Video logging was performed on 11/25/02.
- 5. Deviation Log Information: Deviation logging was performed on 11/25/02.
- 6. Maintenance Performed: Maintenance at A11A31 included removing the pump, discharge/access pipe, and electrical assembly. The USGS performed video and deviation logs. A new 4-in. Grundfos pump was reinstalled to the original depth using the original discharge pipe. The pump was wired with new 8-gauge wire and a 30A/600V plug (NEMA #L17-30).
- 7. Observations Recorded: Surface completion pads and impingement posts were in good condition.
- 8. Maintenance Subcontractor: Dynatec Drilling, Salt Lake City, UT

Field Lead: M. Towler/L. Lopez

WELL ID 906	Well Modification Log	DATE –	11/15/02 END DATE	12/03/02
ME Pump Removal and	Borehole Deviation Logging FY 03	INSTALLATION TEAM	Dyn	
Reason for modification: To perform a deviation log on the borehole.	ne borehole.			Elevation of brass cap? Not Changed
			Stick up of well cas	Stick up of well casing? Not Changed
If yes was pump	If ves was pump returned to original depth?	pth? X	Well Description	Satisfactory Needs repair
yes]	Casing condition	×
Are measurements from top of casing or land surface? Top	Top of the MP		Concrete pad	×
			Guard post	×
	Ритр Модіпсатоп Г		Screen	×
H— H—H Ose diagram explain modification	Туре	4 inch Grundfos	Lock & cap	×
	Manufacturer	Grundfos	Discharge Line (Riser Pipe) Modification	oe) Modification
	Model #	10S 20-27	Material	
	Pump length	3.5 ft	Diameter	pailied
	Top of pump	657 ft bls	Height above ground	Not How
	Bottom of pump	660.5 ft bls	Denth BLS	
	Inlet depth	658.5 ft bls	7 4 00000	Modification
	Horse power	2 hp		Modification
	Flow rate	Not measured	ויומופוומו	
	Head	Not measured	Diameter	palified
	Volts, Amps, Kw	230v, 6.7 amp, 1.5 kW	(stick-up)	Non
	Phase		Depth BLS	
	Material	Stainless steel	Measure Point	
	Motor leads/Plugs	30 amp, 600volt	Height above ground (stick-up)	Not Modified
	Protective Casing		Well Casing	
	- Constant		Material	
	iviaterial	pain	Diameter	po.s.
▶ †	Diameter	MOT MOOII	Height above ground	Not Modified
	Height above ground (stick-up)	•	Depth BLS	
Comments:	he pump and pipe	The pump and pipe were replaced to their original depths. New 8 gauge electrical cable was installed	al depths. New 8 gauge	electrical cable was insta
	Jeviation log was pe	Deviation log was performed on 11/25/02.		
Video Logs: yes	X no date	11/25/02	Signature and date:	Mike Towler 12/10/02
Well jetted /cleaned: yes	yesX	date		
Performed by:	Dynatec			

Figure 2-41. Well modification log for RWMC-MON-A-013.

2.41 RWMC-MON-A-066 (OW-2)

WELL ID: 1132

- 1. Project Name: Pump Removal and Deviation Logging for FY 2003
- 2. Well Location: RWMC
- 3. Date Maintenance Performed: Started: 11/15/02 Completed: 11/26/02
- 4. Video Log Information: Video logging was performed on 11/25/02.
- 5. Deviation Log Information: Deviation logging was performed on 11/25/02.
- 6. Maintenance Performed: Maintenance at OW-2 included removing the pump, discharge/access pipe, and electrical assembly. The USGS performed video and deviation logs. A weep hole was installed at 622 ft bls. All well equipment (i.e., pump, pipe, and wire) was then reinstalled to its original depth.
- 7. Observations Recorded: Surface completion pads and impingement posts were in good condition.
- 8. Maintenance Subcontractor: Dynatec Drilling, Salt Lake City, UT

Field Lead: M. Towler/L. Lopez

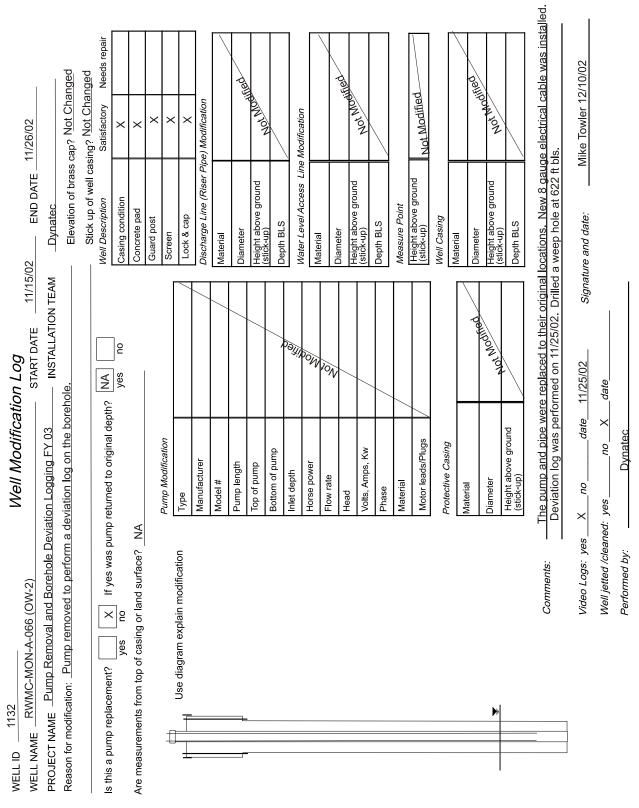


Figure 2-42. Well modification log for RWMC-MON-A-066.

2.42 USGS-009

WELL ID: 458

1. Project Name: Site-wide Well Maintenance for FY 2003

2. Well Location: South of RWMC on the T-1 road

3. Date Maintenance Performed: Started: 6/30/03 Completed: 9/11/03

- 4. Video Log Information: Dynatec personnel and the field crew collected a video log on 7/8/03. Due to a significant amount of debris in the borehole, visibility was limited. The need to jet and clean the borehole was noted. A well brush was also noted in the well.
- 5. Maintenance Performed: Maintenance at USGS-009 included removing the 5-hp pump, discharge/access pipe, and electrical assembly; jetting and cleaning the borehole; installing a new pump (refer to well modification logs); replacing old galvanized pipe with stainless-steel pipe (refer to well modification logs); and replacing the electrical wire with new 8-gauge wire equipped with a 30A/600V plug (NEMA #17-L30). The well brush was removed from the well on 7/14/03 before cleaning and reinstalling the pump.
- 6. Observations Recorded: Surface completion pads and impingement posts were in good condition.
- 7. Maintenance Subcontractor: Dynatec Drilling, Salt Lake City, UT

Field Lead: B. Reynolds/L. Lopez

WELL ID 458	Well Modification Log			
		— START DATE6/30/03	33 END DATE 9/11/03	9/11/03
PROJECT NAME — FY 03 Sitewide Wide Well Maintenance	nance	INSTALLATION TEAM	Dynatec	
Reason for modification:Replace the pump, pipe, wire; jet and clean the borehole; video and log	re; jet and clean the bo	prehole; video and log.	Elevation of brass cap?	cap? Not Changed
			Stick up of well cas	Stick up of well casing? Not Changed
s this a nump replacement?	sex was name returned to original denth?	X >#c	Well Description	Satisfactory Needs repair
yes no		_	Casing condition	×
vre measurements from top of casing or land surface? _Casing	asing		Concrete pad	×
	D. man Modification		Guard post	×
Ilse diagram explain modification	Fump Mounication		Screen	×
	lype	Submersible	Lock & cap	×
	Manufacturer	Grundfos	Discharge Line (Riser Pipe) Modification	oe) Modification
	Wodel #	16S50-38	Material	Stainless Steal
	Pump length	5.1 ft	Diameter	15 in
	Top of pump	655 ft bls	Height above ground	3#
	Bottom of pump	660.1 ft bls	Depth BLS	655 ft bls
	Inlet depth	659.1 ft bls	Water Level Access Line Modification	Modification
	Horse power	5 hp	Material	
	Flow rate	Not Measured		Stainless Steal
	Head	613 ft	Diameter	1 in.
	Volts, Amps, Kw	460V/9 9A/5kW	Height above ground (stick-up)	3 ft.
	Phase	3 phase	Depth BLS	625 ft
	Material	Stainless Steel	Measure Point	
	Motor leads/Plugs	8 gauge, 600V/30A plug	Height above ground (stick-up)	Not Modified
	Protective Casing		Well Casing	
	Material		Material	
		Pallit	Diameter	pallik
▶ Ir	Diameter	Mod Mod	Height above ground (stick-up)	NOT MON
	Height above ground (stick-up)	2	Depth BLS	
	The video of this well	The video of this well showed excessive amounts of debris so the well was jetted and cleaned.	of debris so the well wa	as jetted and cleaned.
Comments:	A well brush found c	A well brush found during the video log was also removed.	removed.	
Video Logs: yes_	X no date	date7/8/03Signa	Signature and date: <u>Boe</u>	Boe Reynolds 8/5/03
Well jetted /cleaned: yes_	d: yesXno	date 7/14/03		
Performed by:	Dynatec			

Figure 2-43. Well modification log for USGS-009.

2.43 USGS-019

WELL ID: 468

- 1. Project Name: Site-wide Well Maintenance for FY 2003
- 2. Well Location: Northwest of the Naval Reactors Facility (NRF)
- 3. Date Maintenance Performed: Started: 6/11/03 Completed: 7/20/03
- 4. Video Log Information: The USGS video logged well USGS-019 on 6/17/03. The video showed a slotted carbon-steel screen with rust composite caked on the inside of the screen. The top of a 3/4-in. poly vinyl chloride pipe was visible at 327 ft bls; several pieces of pump tape were also noted.
- 5. Maintenance Performed: Maintenance at USGS-019 included removing the pump, pipe, and electrical assembly; jetting and cleaning the borehole; removing sediment in the well with a sand pump, installing a new pump (3-hp, 3-phase); replacing old galvanized pipe with stainless-steel pipe (1.25-in. discharge and a 1-in. water access line); and replacing the electrical wire with new 10-gauge wire equipped with a 30A/600V plug (NEMA #17-L30).
- 6. Observations Recorded: Surface completion pads and impingement posts were in good condition.
- 7. Maintenance Subcontractor: Dynatec Drilling, Salt Lake City, UT

Field Lead: B. Reynolds/L. Lopez

WELL ID 468	Well Modification Log	ation Log		
WELL NAME USGS-019		START DATE 6/11/03	END DATE 7/20/03	//20/03
PROJECT NAME FY 03 Sitewide Wide Well Maintenance	ance	METALIATION TEAM	Dynatec	
Reason for modification: Clean, jet, and video; replace galvanized pipe with stainless; and install a	alvanized pipe with	stainless; and install a	Elevation of brass can?	Not Changed
working pump.			Stick up of well casing?	Not Changed
Is this a pump replacement?	If yes was pump returned to original depth?	pth?	Well Description	Satisfactory Needs repair
yes		yes	Casing condition	×
Are measurements from top of casing or land surface? Land Surface	d Surface		Concrete pad	×
	2 - 13 - 13 - 14 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -		Guard post	×
	<i>Ритр Модіпсатон</i>		Screen	X
Use diagram explain modification	Туре	4 in. Submersible	Lock & cap	×
	Manufacturer	Grundfos/Franklin Electric	Discharge Line (Riser Pipe) Modification	e) Modification
	Model #	10S30-34	Material	Stainless Steel
	Pump length	4.58 ft	Diameter	1.5 in.
	Top of pump	323.7 ft	Height above ground	25#
	Bottom of pump	328.28 ft	Depth BLS	323.7 ft
	Inlet depth	327.28 ft.	970000	I ine Modification
	Horse power	3 horse		Modification
	Flow rate	Not Measured	iviateriai	Stainless Steel
	Head	NOT MEdsuled	Diameter	1 in.
	Volts, Amps, Kw	230V/9 5A/2 2KW	reignt above ground (stick-up)	2.5 ft
	Phase	2 phase	Depth BLS	Aproximately 304 ft
	Material	Stainless Steel	Measure Point	
	Motor leads/Plugs	10 gauge/ 600V/30A plug	Height above ground (stick-up)	Not Modified
	Protective Casing		Well Casing	
	loisoto Campi		Material	
	Material	P	Diameter	pais.
>	Diameter	Mot Modifie	Height above ground	Mod Mod
	Height above ground (stick-up)		Depth BLS	
	here is a 3/4 in PVC	There is a 3/4 in PVC pipe located in the well at approximately 327 ft bls. It apperared to have	proximately 327 ft bls.	It apperared to have
ı	been broken off and lost in the well	lost in the well.		
Video Logs: yes	X_nodate	date_6/17/03Signat	Signature and date: <u>Boe</u>	Boe Reynolds 8/5/03
Well jetted /cleaned: yes	yesXno	date_7/20/03		
Performed by:	Dynatec			

Figure 2-44. Well modification log for USGS-019.